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ABSTRACT

The piloting of a questionnaire concerning teacher competency and the outlining for a future study on determining teacher role are described in this document. The background of the performance-based teacher education movement and its psychological underpinnings are discussed. A list of 150 teacher activities and a partially annotated bibliography of 119 citations are included in the appendices. (DT)

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A STUDY OF TEACHER COMPETENCIES

By

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Del Mod Fellow



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Background

Albert Shanker¹, President of the United Federation of Teachers, has recently stated: "In a period in which so many important educational issues are being endlessly debated, it is pleasing to report general agreement on the proposition that the present system of teacher training, selection and certification is inadequate." Current teacher education programs consist generally of a series of college courses and student teaching internship. Teacher selection is usually based on criteria such as (a) the attainment of a college degree, (b) a period of student teaching, (c) favorable recommendations, and (d) an interview. While these criteria are easily identified, they provide little information as to how the new teacher will actually perform in the classroom.

In contrast to this picture is the current performance-based teacher education movement (PBTE). In PBTE programs, performance goals are specified in detail and agreed upon before instruction commences. The student, in this case an in-service teacher, must be able to demonstrate his ability in performing the essential tasks of teaching and, in turn, the teacher education institution is held accountable for producing competent teachers.

As Elias² has noted, "early efforts to relate teaching behavior to pupil learning, college success to vocational success, and theory to practice in practicums and internships, all stretch back into the early history of pedagogical training in our century." However, the occurrence of a unique series of events during the sixties focused attention on experimentation with performance-based teacher education

¹Shanker, Albert. "Teacher Training and Certification: The Search for New Programs," New York Times Newspaper, Sunday, December 3, 1972, pg. E7.

²Elias, Stanley. "Performance-Based Teacher Education: What's The State of The Art," American Association of Colleges for Teacher Education, PBTE Series No. 1, 1971.

programs. These events are described by Blam as follows:

- (a) The current accountability movement, while historically following FBTE, holds a common body of concepts with FBTE and thus serves to reinforce the FBTE position.
- (b) The roots of FBTE may be found in general societal conditions of the sixties and institutional responses to them. For example, the claim that teacher education programs were not producing teachers who could deal with the conditions and events in ghetto classrooms highlighted the need for teacher education reform.
- (c) The successful launch of the Russian Sputnik legitimized the federal government's role in education. Federal money became available for a number of experimental programs, including the ten elementary education models founded by the Office of Education.
- (d) Technological developments have made available new resources for teaching and learning, and may fundamentally change the teaching role.
- (e) Management concepts such as the systems approach which originated in business and industry were applied to the educational enterprise.
- (f) The education profession has matured in the sense that there have been important advances in the art and science of teaching (notably from Skinner and Gagne) and that teachers are securing a greater voice in the decision-making processes that directly affect them.

It is the unique combination of the above trends and concepts which have resulted in the notion of educational product testing (the student), with teacher behavior identified as the causative agent.

Introduction

The American Association of Colleges for Teacher Education (AACTE) Board of Directors recently established a committee and mandated it to find out what was going

on under the rubric of Performance-Based Teacher Education and to inform the profession on the present state of the art. Stanley Elan, editor of Phi Delta Kappa Publications served as author for the committee's report. In the report, Elan states that at the present time a complete description of FBTE is not possible. Authorities in the area differ a good deal over terminology and specific details of the approach. In spite of this, there is consensus on what elements are essential to distinguish FBTE from the more conventional teacher education programs.

Elan enumerates these generic elements as follows:

1. Competencies (knowledges, skills, behaviors) to be demonstrated by the student are
 - derived from explicit conceptions of teacher roles,
 - stated so as to make possible assessment of a student's behavior in relation to specific competencies, and
 - made public in advance
2. Criteria to be employed in assessing competencies are
 - based upon, and in harmony with, specified competencies,
 - explicit in stating expected levels of mastery under specified conditions, and
 - made public in advance
3. Assessment of the student's competency
 - uses his performance as the primary source of evidence,
 - takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior, and
 - strives for objectivity
4. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion.
5. The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified.

Psychological Underpinning of Performance-Based Education

According to Broudy³, in his recent critique of performance-based teacher education, the assumptions underlying the FBTE approach are as follows:

1. The teaching act is the sum of performances into which it is analyzed.

³ Broudy, Harry S. "A Critique of Performance-Based Teacher Education," American Association of Colleges for Teacher Education, May, 1972.

2. The performance unit is a matter of indifference, i.e., the number and character of the performance units can vary from one program to another.
3. The criterion for the "product" is demonstrated competence in the selected set of training performances.

Certainly these assumptions have a source; i.e., they are rooted in a specific pattern of thinking. The psychological theories that support the FBT assumptions may be broadly categorized as stimulus-response theories. The roots of S-R theory go far back into the history of philosophy, but the behavioristic movement in psychology began with the work of John B. Watson about 1910. Watson maintained that all behavior was learned by associationistic processes, and that only overt, observable behavioral concepts belonged in psychology.

It must be noted that the adoption of an S-R strategy has not resulted in a single S-R school. It is impossible to speak of S-R theory; there are simply too many of them. Stimulus-response theorists sometimes disagree over what assumptions should be adopted, but their disagreements are not divisive as those among different schools of psychology have been. Thus, the following description of the basic principles of S-R theory will apply, in general, to all such theories.

Modern behavioristic S-R psychologists maintain that behavior is learned and that it is the result of many independent learning processes. The unit of behavior is the specific act and each act is independently acquired (note the relationship of this S-R tenet and assumption "1" above). This belief carries a tacit assumption that through learning, behavior is almost infinitely malleable and shapeable. S-R theory seems to assume that any combination and any sequence of behaviors can be learned, perhaps with equal facility. While this seems an overstatement, it should be noted that the theory contains no provision for inherent constraints upon the variety of behavior patterns that can be acquired.

Another basic tenet of S-R theory is that behavior is learned through external reinforcement. The S-R theorist maintains that a behavior pattern is developed be-

cause the individual has been rewarded by somebody for doing it. The theory does provide for acts being self-rewarding, and in some situations it is possible that the events that reinforce behavior do not naively appear to be rewards. Modern ideas of reinforcement are by no means unitary in their meaning. If there is anything in common about the idea, it is its emphasis on the after-effects of the response that is to be learned. To Thorndike, the satisfying after-effects strengthened the association; to Hull and his colleagues, learning was influenced by after-effects of a sort that brought about drive reduction; to Skinner, the activity to be learned must be made to take place in such a way that after-effects are made contingent on its occurrence.

The behaviorism of two S-R theorists, in particular, seems to have influenced the current manifestations of FTS; these are B. F. Skinner and Robert M. Gagne.

The use of technology in FTS is based on the assumption that technology is fundamental to teaching. Teaching materials which receive heavy emphasis in FTS programs include programmed instruction, computer assisted instruction, simulation, gaming, etc. This technology is clearly based on principles derived from Skinnerian experimental analysis of behavior. The application of operant conditioning to education is simple and direct. As noted by Skinner:⁴

Teaching is the arrangement of contingencies of reinforcement under which students learn. They learn without teaching in their natural environments, but teachers arrange special contingencies which expedite learning, hastening the appearance of behavior which would otherwise be acquired slowly or making sure of the appearance of behavior which might otherwise never occur.

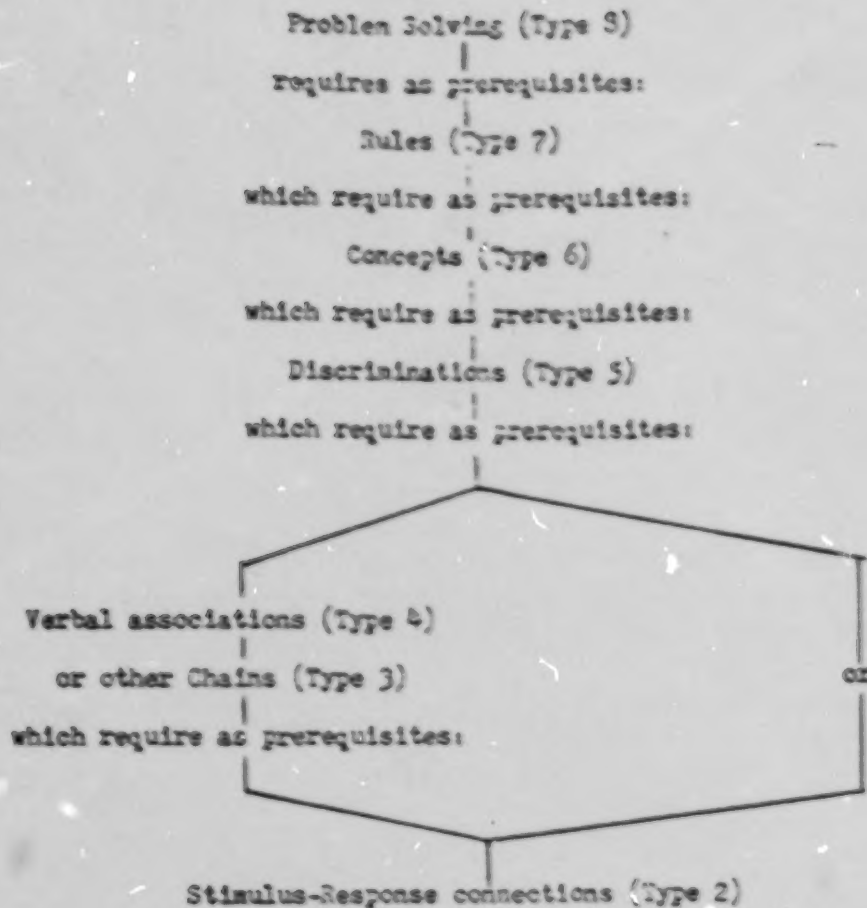
In his experimental study of learning, Skinner has found that the contingencies of reinforcement which are most efficient in controlling the individual cannot be arranged through the personal mediation of the experimenter (or teacher). Skinner believes that an organism is affected by subtle details of contingencies which are

⁴ Skinner, B. F. The Technology of Teaching. New York: Appleton-Century-Crofts, 1968.

beyond the capacity of the teacher to arrange. Hence, mechanical and electrical devices must be used. Mechanical help is also demanded by the huge number of contingencies which may be used in a single learning session. Skinner maintains that the most effective control of human learning will require instrumental aid and his solution is the teaching machine. This machine is simply any device which arranges contingencies of reinforcement. The success of such a machine depends on the material used in it. Through various programmed materials and programming techniques, specific forms of behavior are evoked and by differential reinforcement brought under the control of specific stimuli.

The influence of Gagne's learning theory is evidenced in many of the features of POTE. The use of behavioral objectives, the emphasis on hierarchies of behaviors, and the use of criterion referenced pretests and posttests are techniques which derive support from Gagne's theory. Gagne⁵ contends that there are at least eight varieties of learning, each beginning with a different state of the organism and ending with a different capability for performance. Gagne believes that an individual learns a hierarchial sequence of capabilities; i.e., the level capabilities are viewed as prerequisites for the higher level capabilities. Gagne's general developmental sequence representing the cumulative effects of learning is illustrated below.

⁵ Gagne, Robert M. The Conditions of Learning. New York: Holt, Rinehart and Winston, 1970.



The critical point in Gagne's theory, for R.T.S., is that these varieties of learning form a sequence of capability acquisition, called a learning hierarchy. More specifically, a learning hierarchy is:

An entire set of capabilities having an ordered relation to each other, in the sense that in each case prerequisite capabilities are represented as subordinate in position, indicating that they need to be previously learned.

It is important to note what Gagne means by a capability. For him, the capability embodies an identifiable intellectual skill, something that the individual is able to do with reference to his environment.

For Gagne the initial step in deciding on the conditions for learning is de-

fining objectives. For any given occasion on which the individual is to perform a task, there must be a decision about the nature of the changes in behavior sought. This decision makes it possible to infer what kind of input needs to be made to the learner, i.e., what kind of learning situation needs to be established to bring about the change.

Finally, Gagne states that tests should be designed to assess the immediate outcomes of learning. The aim of such tests is to measure the extent to which each learner has achieved the defined objective with which the instructional unit was concerned. This type of test is called a criterion-referenced test since scores on the test derive their meaning by reference to an external criterion or standard.

In summary, it is important to realize that FBTE is a multifaceted concept whose roots may be found in the behavioristic S-R strategy and that educators embracing various S-R positions will exert their unique influence on FBTE's ultimate direction. By selecting and emphasizing those aspects of FBTE which are most closely related to their own thought patterns, educators can influence the ultimate result of an emphasis on FBTE.

Objective

The present study will focus on the first of the elements characteristic of FBTE, namely, that the competencies to be demonstrated by the student should be derived from explicit conceptions of teacher roles.

Thus, the purpose of this study is twofold:

- (a) to determine empirically "teacher role" in various areas of teacher competency as described by the teacher, the school administrator and Faculty of the College of Education at the University of Delaware
- (b) to compare and contrast the empirically derived role descriptions from the various groups

Method

(a) Subjects

1. Pilot study. 28 junior high school teachers in eastern Maryland were used to pilot test the survey questionnaire.
2. Main study. A 50% random sample of secondary public school teachers (7th - 12th grade) in the State of Delaware will be selected from the respective population of 2,345.

(b) Materials

The materials will consist of semi-structured teacher activity questionnaire and a biographical inventory. (See Attachment A)

(c) Procedure

Fundamental to the development of role models is the determination of what behaviors should be expected of the teachers. Within a framework of systems analysis, an efficient method for obtaining this information is job analysis.

The analysis of the job of school teachers began with a listing of all activities which comprise the job as it is forecasted for the future. To complete this listing, the following procedures were performed. A review of the literature covering the period 1967-1972 was conducted in the areas of

- performance (competency) - based teacher education
- teacher role
- job analysis
- role description
- role perception
- teacher responsibility
- teacher education
- performance criteria
- educational accountability

The initial review indicated that the major work in the area was ten pre-service elementary teacher education models prepared for the Office of Education. Each of these models was examined in terms of teacher behaviors they recommended, and a master list of these behaviors was compiled in the following manner:

- by inspection, the University of Pittsburgh model seemed to offer the widest range of teacher activity categories and it was used as the basic framework which was modified as additional teacher behaviors were added to it;
- in order to categorize the teacher behaviors in all ten models, it was decided to utilize Wager's distinction of terminal and enabling behaviors; it was further decided to consider only those behaviors which could be categorized as "terminal" in nature.

This process resulted in a teacher competency model which includes ten major activity areas and 150 teacher activities (see Attachment A).

Scales related to each of the following questions were established so that information on each teacher activity could be obtained:

1. Do you presently perform this activity?
2. Do you feel teachers should be able to perform this activity?
3. How important is (would be) this activity for teachers?
4. Where did you learn to perform this activity?
5. Where should you learn to perform this activity?
6. When did you learn to perform this activity?
7. When should you learn to perform this activity?

(the last two questions are the result of revisions made after the pilot test)

The total questionnaire was divided into 5 groups, each containing two of

the ten major teacher activity areas. The 5 groups were arranged in an order which resulted in each group containing approximately the same number of teacher activities. The questionnaires were pilot tested with 29 junior high school teachers in eastern Maryland. The respondents were asked to complete the questionnaire and also to modify those activities which were unclear, too complex, etc.

Revisions to the questionnaire were made based on pilot test information. Essentially, the revisions consisted of (a)simplifying the language used to express the activities, (b)adding two additional questions (see questions 6 and 7 above), and (c)modifying the scale categories for questions 4 and 5.

Finally, the pilot test results indicated that two major teacher activity areas was too much material for one person to complete in a reasonable amount of time (the estimated average time for completion of the two areas was approximately 40 minutes). Hence, the random sample of approximately 1,200 secondary teachers will be randomly divided into 10 subgroups and each group will be asked to respond to one major activity area.

Attachment A

Teacher Competency Questionnaire

7. When should you learn to perform this activity?

When did you learn to perform this activity?

Should you learn to perform this activity?

Learn to perform this activity?

(Would be) this activity for teachers?

How should be able to

This activity?

1. Yes

2. No

3. Statement of activity is not clear.

1. Don't know

2. One of the least im-

portant

3. Relatively unimportant

4. Relatively important

5. One of the most important

1. Strongly agree

2. Agree

3. Undecided

4. Disagree

5. Strongly Disagree

1. Didn't learn prior to teaching experience

2. Course work during teaching experience

3. Course work during teaching experience

4. Formal Inservice Training conducted by a consultant or agency not part of your school district

5. Informal conferences with administrator, department head or supervisor

6. From fellow teachers

7. On my own

1. Didn't learn prior to teaching experience

2. Course work during teaching experience

3. Course work during teaching experience

4. Formal Inservice Training conducted by a consultant or agency not part of your school district

5. Informal conferences with administrator, department head or supervisor

6. From fellow teachers

7. On my own

1. Didn't learn prior to student teaching

2. Prior to student teaching

3. During student teaching/internship

4. During last year of teaching

5. During 2nd-5th year of teaching

6. After six years of teaching

1. Don't know

2. Prior to student teaching

3. During student teaching/internship

4. During last year of teaching

5. During 2nd-5th year of teaching

6. After six years of teaching

TEACHING COMPETENCY STUDY

LIST OF ACTIVITIES

11/21/72

1. Specifying Learning Goals

Teachers should be prepared to specify learning goals and objectives in terms of observable and measureable student behavior.

The student will gain
an appreciation of the
importance of Western
European literature



- 1.01 Identify learning objectives which refer to cognitive, affective and psychomotor behavior.
-
- 1.02 State in writing, learning objectives of each type, (cognitive, affective and psychomotor) in terms of student behaviors which are observable and measurable.
-
- 1.03 Interpret learning outcomes in terms of written performance standards.
-
- 1.04 Specify in writing any relationships among the cognitive, affective and psychomotor learning objectives.
-
- 1.05 Specify in writing, any relationships among learning objectives from one curricular area to another.
-
- 1.06 Translate broad societal aims for schools into relevant learning goals.
-
- 1.07 Communicate to pupils, teachers, parents, and others, the reasons for establishing learning objectives.
-

2. Assessing The Student

Teachers should be able to provide a detailed analysis of the initial capabilities of the student in a curriculum area. This analysis would provide information which could be useful in evaluating the curriculum and the student. A student's movement through the curriculum would be based on the evaluation process and information from posttest measures and would be used as an aid in making decisions regarding long-term and short-term plans.

learning can be fun



**REG
HISER**

**"IT'S AMAZING HOW MUCH THE
HUMAN MIND CAN FORGET."**



**"In computing your grades, I first established the norm--
and, oh, to hell with it!"**

- 2.01 Demonstrate competency in the use of rating methods to evaluate pupils' accomplishments of various learning objectives.
-
- 2.02 Demonstrate competency in the use of observational methods to evaluate pupils' accomplishments of various learning objectives.
-
- 2.03 Demonstrate competency in the use of interview methods to evaluate pupils' accomplishments of various learning objectives
-
- 2.04 Demonstrate competency in the use of situational measures (e.g. role playing situations) to evaluate pupils' accomplishment of various learning objectives.
-
- 2.05 Calculate basic descriptive statistics such as mean, median, mode, standard deviation.
-
- 2.06 Administer standardized aptitude and achievement tests.
-
- 2.07 Score standardized aptitude and achievement tests.
-
- 2.08 Interpret standardized aptitude and achievement tests.
-
- 2.09 Construct norm-referenced tests
-
- 2.10 Construct criterion-referenced tests.
-
- 2.11 Select appropriate placement tests to identify a pupils' achievement level in a given curricular area.
-

- 2.12 Administer and score placement tests.
-
- 2.13 Interpret placement test results to identify a pupil's achievement level within a curricular area.
-
- 2.14 Utilize test results as one piece of information to identify a pupil's learning difficulties.
-
- 2.15 Involve the pupil in evaluating and interpreting his test result.
-
- 2.16 Demonstrate competency in reporting test results in numerical, graphic, or verbal form to other staff members.
-
- 2.17 Construct appropriate pretests.
-
- 2.18 Administer and score appropriate pretests.
-
- 2.19 Interpret pretest results for determining a pupil's next learning task within a curricular area.
-
- 2.20 Construct appropriate posttests.
-
- 2.21 Administer and score appropriate posttests.
-
- 2.22 Interpret posttest results for determining mastery of a given learning task.
-
- 2.23 Develop records regarding pupil achievement.
-

2.24 Maintain records regarding pupil achievement.

2.25 Initiate case studies of pupils when they cannot successfully complete a learning task.

2.26 Determine evaluation techniques which are appropriate for the related learning objective.

2.27 Observe informal learner reactions to your instruction.

2.28 Evaluate the attending behavior of learners by observing posture, gaze level, and responses.

2.29 Demonstrate procedures which involve the learners in self-evaluation.

3. Diagnosing Student Characteristics

Important characteristics of the student are always changing. Thus, teachers will need refined observational skills to recognize these developing characteristics. In addition, teachers should be proficient in using techniques to organize existing data for an improved appraisal of the learner.



- 3.01 Report in writing a pupil's general intellectual functioning as it is observed by you in a variety of learning activities.
-
- 3.02 State in writing a summary of the accumulated data pertaining to intellectual capacity, taking account of the pupil's background, developmental level, and reaction to testing.
-
- 3.03 Identify appropriate tests which could be used to improve the appraisal of a pupil's general intellectual capacities.
-
- 3.04 Report in writing a pupil's sensory functioning, motor development, and general health.
-
- 3.05 State in writing a summary of the accumulated data pertaining to the pupil's sensory functioning, motor development and general health.
-
- 3.06 Identify appropriate sources which could offer additional information to improve the appraisal of a pupil's physical condition.
-
- 3.07 Report in writing a pupil's emotional condition as observed by you in a variety of learning activities.
-
- 3.08 State in writing a summary of the accumulated data pertaining to the pupil's emotional condition.
-
- 3.09 Identify other sources and evaluative techniques which could be used to improve the appraisal of a pupil's emotional condition.
-

3.10 Report in writing a pupil's social attitudes and behavior as observed by you in a variety of learning activities.

3.11 State in writing a summary of the accumulated data pertaining to the pupil's social attitudes and behaviors.

3.12 Identify other sources and evaluative techniques which could be used to improve the appraisal of a pupil's social attitudes and behavior.

3.13 Describe in writing the family, community and cultural background of the pupil and relate information to what is known about the social foundations of education.

3.14 State in writing a summary description of a pupil's learner characteristics acknowledging the relationships among his intellectual, physical, emotional, and social characteristics.

4. Planning Long-Term and Short-Term Learning Programs: Instructional Strategies

This section concentrates on the principles for selecting and organizing learning programs. These principles will have utility across all areas of the curriculum.



- 4.01 State in writing a long-term program that spells out the relative emphasis to be placed on different types of learning goals and on work within one (or more) curricular areas.
-
- 4.02 Utilize a pretest to specify what learning objectives a pupil will next undertake.
-
- 4.03 Utilize data on the pupil's characteristics as a learner in selecting the method (lecture, demonstrations, etc.) and setting (classroom, field trip, etc.) and criterion (in class test, term paper, etc.) for his learning.
-
- 4.04 State in writing the prerequisite performances needed by each learner.
-
- 4.05 Select materials and equipment that the pupil will employ in the given learning task.
-
- 4.06 Select instructional methods and learner activities appropriate for the tasks (deductive, inductive, lecture, group discussion, individualized instruction, laboratory investigation, audio-visuals).
-
- 4.07 Develop (in writing) and implement a plan to provide for the pupil to take alternative routes toward accomplishing the learning objectives.
-
- 4.08 Provide for the pupil to employ self-direction in performing the learning task.
-
- 4.09 Develop (in writing) and implement a plan to provide for obtaining data on the pupil's performance of the learning task for use in assessing his progress and identifying his difficulties.
-

- 4.10 Estimate when the pupil will complete the learning task.
-
- 4.11 Develop (in writing) and implement a plan for interrelating the pupil's learning task in one curricular area with concurrent learning tasks in other areas.
-
- 4.12 Develop (in writing) and implement a plan for the pupil's group learning situations.
-
- 4.13 Develop (in writing) and implement a plan by which the pupil will request assistance or teacher will volunteer help.
-
- 4.14 Provide a written analysis of current curriculum materials (texts & content packages).
-
- 4.15 Select and organize curriculum content so that it matches learning objectives.
-

5. Guiding Students in Their Learning Activity

The teacher is responsible for guiding the behavior of the student. To accomplish this task, the teacher must be aware of the needs of each student.



"I'M PROGRESSING AT MY OWN
RATE...WHOSE RATE ARE YOU
PROGRESSING AT?"



"Miss Markham said I could progress at my own speed, so
I'm wearing sneakers."

- 5.01 Diagnose nature of learning difficulty by listening to pupil questions, referring to appropriate records, and consulting with colleagues.
-
- 5.02 Record the findings of the diagnosis in those situations revealing a significant pupil obstacle or inadequacy of curriculum materials.
-
- 5.03 Describe in writing, the extent to which the pupil has utilized alternative approaches to the learning task.
-
- 5.04 Assist the pupil immediately by examples, questions, prompting, hypothesizing, clarifying, organizing data, etc.
-
- 5.05 Provide the pupil with a peer tutor.
-
- 5.06 Convene special help groups around specific learning tasks.
-
- 5.07 Schedule activity so that pupils can work on an independent, pupil-team, or subgroup basis as called for in their individual learning plans.
-
- 5.08 Schedule the pupils in the class to provide them with access to the space, equipment, and learning materials they require.
-
- 5.09 Make provisions for safety, pupil mobility and volume control.
-
- 5.10 Arrange furniture, materials, and learners so the facilities are conducive to conducting instruction and the learners are comfortable, can see and hear.
-

5.22 Use learner's ideas during the course of a lesson.

5.23 Establish and maintain eye contact.

6. Guiding Off-Task Student Behavior

Behavior of students which is not directly related to the learning activity is called off-task behavior. Teachers need systematic and analytical approaches for guiding this behavior.



"THE WAY IS FOR IT... WE HAVE TO GIVE OUR LITTLE -
HUMANITY TO THEM AND RESERVE THE
RESPONSIBILITY OF SOCIETY..."

- 6.01 Utilize different approaches to behavior discipline and motivation.
-
- 6.02 Involve pupils in deciding on acceptable pupil conduct.
-
- 6.03 Reinforce acceptable behavior of pupil.
-
- 6.04 Identify sources of deviant behavior.
-
- 6.05 Intervene appropriately and consistently in cases of deviant behavior.
-
- 6.06 Initiate case studies when behavior continually obstructs learning activities.
-
- 6.07 Determine sources of inter-personal conflicts.
-
- 6.08 Assist in the resolution of inter-personal conflicts.
-
- 6.09 Distinguish between habitual and temporary deviant behavior and inter-personal conflict.
-
- 6.10 Involve pupils periodically in self-evaluation and behavior control procedures.
-
- 6.11 Use consultation from colleagues and para-professionals in dealing with behavior direction.
-

7. Employing Teamwork With Colleagues

Effective participation on a team requires specific skills and attitudes in the areas of cooperation and leadership. Teams also require a continuing concern for the process by which they operate. Thus, evaluative skills are equally important for effective team functioning.

- 7.01 Define the organizational patterns of teams active in the operation of the school.
-
- 7.02 Define the differentiated roles present on each team active in the operation of the school.
-
- 7.03 The teacher should participate in team activity by revealing the way he/she sees and does things.
-
- 7.04 The teacher should participate in team activity by explaining his/her behavior in a situation in order to receive back clear and accurate information concerning the relevancy and effectiveness of his/her behavior.
-
- 7.05 The teacher should participate in team activity by trying out new patterns of thought and behavior in order to experience the process of change.
-
- 7.06 The teacher should participate in team activity by helping colleagues learn how to learn from the process of presentation-experimentation-feedback.
-
- 7.07 The teacher should evaluate team activity by examining the patterns of communication in the team.
-
- 7.08 The teacher should evaluate team activity by examining the decision-making procedures of the team.
-
- 7.09 The teacher should evaluate team activity by examining the decision-making procedures of the team.
-
- 7.10 The teacher should evaluate team activity by observing the behavior of the team from the point of view of what its purpose or function seems to be.
-

7.11 The teacher should evaluate team activity by identifying forces which disturb team work.

7.12 The teacher should evaluate team activity by identifying consulting resources needed by team.

1 Enhancing Development

The teacher should recognize those personal traits which appear to affect his learning process or his skills of interaction with the students. This personal understanding should lead to an improved mental health status.

- 8.01 Participate in activities which will help reveal those personal traits which tend to limit his flexibility of behavior.
-
- 8.02 Analyze personal strengths and weaknesses which affect professional behavior.
-
- 8.03 Analyze values which affect professional behavior.
-
- 8.04 Analyze attitudes toward authority, supervision, learning which affect professional behavior.
-
- 8.05 Formulate in writing a general plan of self-development to overcome limiting factors.
-
- 8.06 Modify personal behavior after interpreting evidence of performance.
-
- 8.07 Display self-acceptance by being attentive and responsive to pupils.
-
- 8.08 Display empathy and concern for children, including withdrawn, hostile, and non-productive children.
-
- 8.09 Display objectivity and rationality in dealing with each pupil's intellectual, personal, and social problems.
-
- 8.10 Evidence confidence and emotional control in responding to pressures and problems.
-
- 8.11 Demonstrate flexibility in personality by providing for differences to pupil ideas, wishes, actions and feelings.
-
- 8.12 Demonstrate flexibility by not becoming uneasy as children mention antisocial or asocial behavior.
-

8.13 Allow children to vent and express strong personal feelings.

8.14 Avoid creating anxiety producing learning situations.

8.15 Listen to and view children's emotional behavior and irrational statements without becoming anxious and disorganized.

8.16 Within reasonable limits of self-expression, control expressions of attitudes, feelings and emotional responses and shifts of tone and voice and gestures.

8.17 Express enthusiasm for knowledge, for instruction, for furthering own learning, and for pupils achievement and interest.

8.18 Exhibit friendly and cooperative behavior in relationship with other members of the school staff and parents.

8.19 Accept the impossibility of effectively relating with every child and adult in every circumstance.

8.20 Use effectively the tools of communication.

8.21 Find ways of dealing with conflict, in order that it does not incapacitate one's potential behavioral effectiveness.

8.22 Develop a positive attitude toward change where improvement is the likely result.

8.23 Develop a positive attitude toward inquiry and experimentation.

8.24 Develop a positive attitude toward individual responsibility and initiative.

8.25 Develop a positive attitude toward political power and public relations as means for changing local conditions.

8.26 Develop techniques to deal with fear, hate, love and anger.

Using Instructional Media and Laboratory Equipment

Teachers should be prepared to select and utilize media and equipment to facilitate the accomplishment of learning objectives.

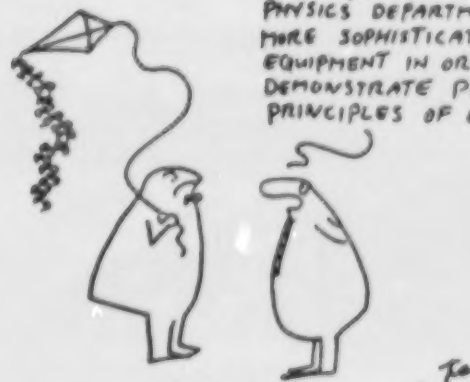


"MAY I ASK WHO'S BEEN DOING YOUR
AV REPAIR WORK?"

I'M NOT SAYING OUR TEACHING
EQUIPMENT IS OLD, OR ANYTHING.
BUT ONE OF THE CHILDREN GOT
TOKYO ROSE ON HER HEADPHONES...



THEN YOU FEEL THAT THE
PHYSICS DEPARTMENT NEEDS
MORE SOPHISTICATED
EQUIPMENT IN ORDER TO
DEMONSTRATE PROPERLY THE
PRINCIPLES OF ELECTRONICS...



9.01 Operate a 16mm sound-film projector, a slide/film-strip projector, a film-loop projector.

9.02 ^{operate in}
A Overhead projector and opaque/overhead projector.

9.03 ^{operate in}
A tape recorder and video recorder.

9.04 Use a variety of media, such as books, movies, programmed texts, audio-tutorial modules, tapes and laboratory equipment, selected upon basis of carefully established criteria.

9.05 Use media to clarify and emphasize main ideas.

9.06 Use media to motivate a new study.

RELATING TO LOCAL CONDITIONS

Teacher must be able to relate the education process to the needs of the local community.

- 10.01 Identify social, political and economic factors which influence educational conditions in the school, local school district, community, county and state.
-
- 10.02 Identify ways in which other teachers have approached and solved problems and issues related to local conditions.
-
- 10.03 Participate in developing strategies for effecting change in local factors and conditions which influence school conditions.
-
- 10.04 Adapt available instructional materials to fit certain local conditions.
-
- 10.05 Adapt general instructional methods and techniques to fit certain local conditions.
-
- 10.06 Conduct public relations.
-
- 10.07 Communicate with parents regarding local conditions and school problems.
-

Attachment B

Teacher Competencies: A Partially Annotated Bibliography

Summary and Evaluation

The present partially annotated bibliography represents the initial effort to review the numerous papers dealing with performance-based teacher education. The bibliography consists of 119 citations; 18 of which are annotated.

An analysis of the 18 annotated citations indicated that certain conclusions recur several times:

- (a) teacher education programs should be individualized and modularized with feedback loops and program alternatives;
- (b) the program emphasis should be on exit rather than entrance behaviors;
- (c) internships are among the most important features of performance based teacher education programs;
- (d) teacher education programs should incorporate student participation in decision making;
- (e) teacher education programs must be based on specific behavioral objectives.

Two of the annotated citations, those of Broudy and Nash, are representative of the dissenting view on PETE. Their view may be summarized as follows:

- (a) teacher education must be strong in theory and evaluate learning on the basis of a student's understanding rather than performance
- (b) humanistic studies must be included in teacher education to: (1) insure that "feeling" is restored to a respected place in education; (2) help students to learn how to think; and (3) to teach the prospective teacher how to relate to students.

Thus far, the review of the material on PETE indicates a body of literature consisting mainly of opinion, discussion and description. It's rather disconcerting to find major teacher education programs being planned and developed on the basis of the performance-based model without either the supporting experimental research data which would indicate the validity of such an approach or the provision to collect the necessary data to validate the PETE approach.

Furthermore, the heart of the PETE approach is its reliance on measurement in-

struments and procedures. FBTE can be successful only if there are reliable and valid means of assessing the competency of the student. However, without exception, the effort in establishing FBTE programs seems to have been devoted to the development of behavioral objectives and instructional materials, to scheduling problems, to arrangements for student-administrator decision-making, and to reorienting the personnel of the "old system" so that they may cope with the "new system." Certainly these issues must be dealt with effectively if a FBTE program is to be given a chance to demonstrate its effectiveness. However, after these real problems are solved, the teaching institution will not have progressed beyond conventional teacher education system unless measurement techniques have been developed to assess complex cognitive and affective behaviors. Based on the present review of FBTE programs, it appears that evaluation has been relegated to an afterthought---to a patch work affair. The developer's effort, measured in time, money and manpower, has been devoted, disproportionately, to producing the materials and hardware, not to developing methods of assessing mastery of them.

Thus, it would seem that, to date, the truly unique feature of FBTE, namely evaluation, has been grossly neglected. Unless this situation is remedied, FBTE will not be given a reasonable opportunity to demonstrate its potential.

Broudy, Harry S. A Critique of Performance-Based Teacher Education,
Washington, D. C.: American Association of Colleges for Teacher Education,
May, 1972, 23p.

The author distinguishes three styles of teaching, namely, the didactic (the importation of knowledge by the teacher to the pupil), the heuristic (teacher helps the pupil discover for himself either the contents of a body of knowledge or the methods of arriving at such knowledge and assessing it), and the philetic (teacher secures rapport with pupils). Broudy maintains that PBTE will produce persons capable only of didactic teaching. The need for those who can design programs and build contexts for learning calls for teacher education which is strong in theory and evaluates learning on the basis of a student's understanding rather than performance.

Chavez, Simon I. "Performance Accountability in Teacher Education,"
Audiovisual Instruction, 16:56-57, March 1971.

The theme of this article is that the education of teachers is a responsibility that must be shared in a school-university partnership. The partnership should be a prototype of the newest and most efficient models and should be staffed by experts in teaching who could demonstrate in practice the various theories of learning and instruction. Also, it should include clinical professors from the university who would work in teams with teachers to develop and demonstrate promising innovations.

Elas, Stanley. Performance-Based Teacher Education. What Is The State of The Art? Washington, D. C.: American Association of Colleges for Teacher Education, 1971, 36p.

This report clarifies the concepts of performance-based teacher education, examines their potential, and identifies problems and questions. Five essential elements are identified: (a)teaching competencies to be demonstrated are role-derived, specified in behavioral terms, and made public; (b)assessment criteria are competency-based, specify mastery levels, and are made public; (c)assessment requires performance as prime evidence and takes student knowledge into account; (d)the student's rate of progress depends on demonstrated competency; and (e)the instructional program facilitates development and evaluation of specific competencies.

Nash, Robert J. "Commitment to Competency: The New Fetishism in Teacher Education," Phi Delta Kappan, 52:240-43; December 1970.

The author argues that teacher educators are offering training only in performance skills at a time when students are demanding training that challenges social and educational values and that places "micro-level" behavior modification in personal and social contexts. He includes questions which educators should ask themselves about fetishism in their programs.

Nash, Paul. The Major Purposes of the Humanistic and Behavioral Studies in Teacher Education. Prepared for working conference of the National Standing Conference on Humanistic and Behavioral Studies in Education. American Association of Colleges for Teacher Education, April 1971, Washington, D. C.

There are three major purposes for humanistic and behavioral studies to be included in teacher education. The first reason is that what students feel has taken a back seat to what they can conceptualise. Educators must see to it that feeling is restored to a respected place in human life and education. A second major purpose is to help students to learn how to think. The third major purpose of humanistic and behavioral studies in teacher education is to teach the prospective teacher how to relate to students in an integrated way.

Wilson, David A. An Annotated Bibliography of Published Works from Research and Development Center for Teacher Education.

This annotated bibliography contains 112 entries grouped according to the following areas: (a)administration, (b)the personalization of teacher education, (c)assessment, (d)the teaching laboratory, (e)curriculum-based approaches to teacher education, (f)team teaching, and (g)projects not currently in progress.

Lindsey, Margaret, et al. Annotated Bibliography on the Professional Education of Teachers.

This annotated bibliography divides into two sections literature related to the professional education of teachers which appeared between July 1967 and June 1968. Section 1 contains 466 entries and is organized into five categories dealing with (1) the current setting of and proposals for teacher education; included are 9 topics, examples are: (a) continuing education and curricular improvement, (b) education for the disadvantaged, (c) teacher roles and responsibilities, etc.; (2) the professional component in teacher education, topics include (a) content and structure, (b) preparation of teachers for the disadvantaged, (c) media and technology; (3) student teachers, interns and beginning teachers; (4) assessment in teacher education; (5) the professional educator. Section 2 presents 164 references to non-print materials in 7 areas: (1) curriculum organization and assessment of instruction, (2) characteristics of learning, (3) study of teachers and teaching, (4) teaching in different subject areas and at different levels, (5) teaching the disadvantaged and atypical pupil, (6) production of materials and use of new media, and (7) sources of teacher education media.

Schaefer, James F. A Bibliography of References Used In the Preparation of Nine Model Teacher Education Programs.

Description:

The nine models were developed in 1968 as a result of the Office of Education's recognition of the need for improvement in elementary teacher education. The models were prepared under the Title, "Comprehensive Undergraduate and In-Service Teacher Education Program for Elementary Teachers," by seven universities, a consortium and a regional education laboratory.

This bibliography has been organized into four major areas:

1. Nature and Training of Teachers
2. Education and Educational Practices
3. Educational Psychology
4. Educational Technology

Barakat, Halim Isber. Alienation From The School System - It's Dynamics and Structure. Ann Arbor: University of Michigan, Institute for Social Research, BH-5-0263, 1966, 129p.

The author argues that both states of overcontrol and undercontrol result in alienation. The first proposition suggests that overcontrol (which refers to a state of overintegration or great emphasis on molding man into some kind of a bureaucratic system) is likely to be related to that system. The second proposition suggests that undercontrol (which is defined in terms of normlessness, uncertainty about goals, and/or lack of cohesive interpersonal relationships in a society or a social system) is likely to be related to alienation from that system.

The author views alienation from the school as a process of three main stages: (a)alienation at the social and normative structure; (b)alienation as an attitudinal tendency; and (c)alienation at the behavioral level.

The data from the study supports the author's first two propositions. The data also supports the author's contention that feelings of alienation from the school system are reflected in teacher's performance. The data showed that the greater the feelings of alienation of teachers the greater the non-adaption of teaching practices. The data also showed that (a)the mildly alienated tended to act upon the system, (b)the moderately alienated tended to comply through adaption, and (c)the highly alienated teachers tended most frequently to retreat from, next to act upon, and least to comply with the school systems.

LeBaron, Walt. "A Systems Approach to the Organization of Teacher Training Experiences," Systems Development Corporation, SP3242, February 1969, 32p.

The author sets out to present a general model for restructuring a program of teacher education, including pre-service and continuing inservice training. The model utilizes systems procedures for analyzing teacher needs and organizing program components. Because the implementation of innovative models is so difficult, the author's model has tried to present innovative ideas in a structural format, adaptable to the realities of higher educational institutions.

Shaftel, Fannie R., et al. The Stanford Evaluation of Nine Elementary Teacher Training Models. Washington, D. C.: Office of Education, ER9-8632, August 1969, 78p.

The purpose of the Stanford project was to evaluate the nine elementary teacher training models. The evaluation report presents (a) general comments involving perceived strengths and weaknesses of all the programs, and (b) analyses of each of the nine models. The evaluation team analyzed the nine models in terms of six major issues: (1) individualized instruction for prospective teachers, (2) modeling behavior, (3) systems analysis and computer technology, (4) behavioral objectives, (5) educational coalitions and (6) innovations and change.

Silberman, Harry and Kooi, Beverly Y. "Some Comments on Nine Elementary Teacher Education Models," Systems Development Corporation, SP3309, March 1969, 13p.

The author reviews the contents of the nine elementary teacher education models. The major points of the critique are (a) the models are insufficiently specific to be immediately operational, (b) the models abandon traditional course structure and promote self-correction, but they are similar in philosophy to current practice and (c) the models do not deal with the structural problems of changing teacher education programs without changing educational institutions.

In the area of objectives, the author states that the specifications of the objectives are very uneven. In many cases, the statements seem to be general goals rather than specific objectives. In the same model, one competency area may have 2 or 3 objectives while another area has a hundred or more. In many cases, the objectives are neither specific enough nor operational enough to be implemented without further definition. In addition, the objectives provided do not provide the necessary conditions and standards associated with the behavior.

Jordan, Daniel C. Report on the Task Force Meeting on Task Analysis and Role Definition. Terre Haute, Indiana: Indiana State University, October 1967, 18p.

The task force suggests that in order for teachers to provide the highly-diverse and wide-ranging services required, a basic strategy of differentiated staffing patterns must be adopted. Priority tasks required for differentiating the profession include: (a)collecting, organizing, storing and disseminating all necessary information (especially role definitions and staffing pattern models) and (b)utilizing this information to create a favorable climate for change. The report includes 3 major appendices: (1)lists of anticipated benefits of differentiated staffing structure; (2)an example of a differentiated staffing pattern model with task analysis for the positions of professional specialist, learning engineer, staff teacher, academic assistant, and technical assistant, and (3)a list of problem areas needing priority attention.

On The Role of The Teacher. Washington, D. C.: National Education Association, 1967, 23p.

The Educational Policies Commission states the following factors affect the teacher's role: (a)expansion of knowledge, (b)development of technology, (c)increasing demand of minority groups for equal opportunity, and (d)importance of education to each individual and society. The commission suggests the teacher, in addition to being a stimulator of learning, is also (1)a member of the teaching profession who must promote the interests of education and of teachers, (2)a contributor to the formulation of educational policy, and (3)a citizen of a community who exercises his right to influence public policies.

The Report of a Symposium on the Training of Teachers for Elementary Schools,
Dayton, Ohio: The Kettering Foundation, 1968, 18p.

This report documents the results of a symposium conducted to ask newly trained elementary school teachers to evaluate their preparation after they had had an opportunity to apply it in the classroom. The proceedings of the symposium indicated that "if feedback from beginning teachers is a reliable source, then it is very apparent that what is being done in the colleges of education has little relation to the on-the-job requirements of elementary school teachers. Twelve recommendations regarding teacher training are proposed:

1. Teacher trainees should be scheduled into laboratory courses built around directed observation beginning in their first year of college and should have many hours of observation in different types of special situations before embarking on a program of practice teaching.
2. Intern teaching should take place in the junior year before the methods courses are taken instead of the senior year after the courses have been taken. The courses will be more valuable and better understood if they follow practice teaching and are used as reinforcement rather than imitation.
3. Professors of Education should use a variety of audio-visual aids in their courses and practice the finest techniques of teaching. If methods courses are valuable, then education professors trained in methodology should be superior in the craft of teaching to liberal arts professors who have not had this training.
4. A massive effort should be put forth to assure that all elementary school teachers are trained in newly developed curricula.

5. A serious effort should be made to improve the image of the elementary school teacher.
6. A major recruitment program should be instituted to draw more men into the profession of elementary school teaching.
7. The principal must assume greater responsibility for assisting and training beginning teachers.
8. School systems should take a hard look at the kind of supervision which they have in their schools and the role of the supervisor should be re-examined especially as it relates to the new teacher.
9. Teachers of methods courses for elementary school teachers should be required to rotate back in the elementary school and teach an elementary class at regular intervals.
10. Teacher trainees should no longer receive all of their teacher training in the most desirable type situations under talented and able directing teachers. They should have experiences in classes with poor teachers in order to fully comprehend the problems with which they will be confronted when they begin teaching their own classes.
11. School systems must assume a special responsibility for helping inexperienced teacher acquire sophisticated teaching skills. One strategy is to deliberately associate beginning teachers with more experienced teachers.
12. New patterns of team association should be developed which will allow beginning teachers to teach as part of a team staffed largely by experienced teachers.

Klingstedt, Joe Lars. "Philosophical Basis for Competency-based Education," Educational Technology, November 1972, pp. 10-14.

The author states that competency-based education is founded on educational justifications derived from the philosophy of Experimentalism. The three fundamental ideas associated with Experimentalism are: (1) the world is in constant change, (2) educational practice should be based on the results of psychological research, and (3) man's psychological and sociological behavior is based on economic and well-being motives. The author is quick to add that the focus of competency-based education is expanding to include ideas from a number of different philosophic viewpoints. The remainder of the paper deals with an example of how the "Process Structuralists" would view competency-based education.

Young, Jan I. and Van Mondfrons, Adrian P. "Psychological Implications of Competency-Based Education," November 1972, pp. 15-18.

The author highlights the differences between conventional education systems and competency-based systems. The conventional system is information-oriented, i.e., the teacher's main role is to dispense knowledge geared toward the average student. In contrast, the student must often initiate learning by using the teacher as a resource. The basic differences in the two educational systems are evident in the amount of freedom and participation provided to students to (a) set their own goals and objectives of instruction; (b) decide the instructional procedures; (c) participate in decisions concerning evaluation procedures; and (d) decide when evaluation takes place. The author suggests that these differences raise questions concerning changes in student effect due to the increased freedom and participation. The remainder of the paper examines these questions under the topics of interest, motivation, frustration, anxiety and self-concept. The author examines each area in terms of existing theory and data.

Burdin, Joel L. and Mathieson, Maria B. "A Review of the Research on Performance-Based Teacher Education," Educational Technology, November 1972, pp. 61-65.

The authors state that most papers dealing with performance-based teacher education amount to opinions, discussions and descriptions. In reaction to this, the authors have assembled a sampling of the research that indicates what has been done and suggests needed research in the future. Seventeen articles are annotated and recurring conclusions are that: (a) teacher education should be individualized and (b) internships are among the most important aspects of preparing educational personnel.

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